

The Heat Index													
Air Temp (° F)	Relative Humidity (%)												
	40	45	50	55	60	65	70	75	80	85	90	95	100
110°	136	143	152										
105°	123	129	135	141	148								
100°	111	115	119	124	129	135	141	147					
95°	101	104	107	110	114	117	122	126	131	136	141		
90°	92	94	96	98	100	103	106	109	112	115	119	127	132
85°	84	85	86	88	89	91	93	95	97	99	102	104	107
80°	80	80	81	81	82	82	83	84	84	85	86	86	87
Exposure to full sunshine can increase Heat Index values by up to 15° F.													
Heat Index	Category	Possible heat disorders for people in high risk groups											
130°F or higher	Extreme Danger	Heatstroke risk extremely high											
105°-129°F	Danger	Heat exhaustion likely, heatstroke possible											
90°-105°F	Extreme Caution	Heat exhaustion possible											
80°-90°F	Caution	Fatigue possible											

In the Twin Cities metro area an emergency heat response will be activated at the advisory and warning levels

WATCH
Forecast indicates likelihood of heat index meeting advisory or warning levels (Issued 1-3 Days in Advance)
ADVISORY
Heat index of 105 for 3 hours or more. (Issued 6-24 Hours in Advance) Note: If the Advisory lasts more than 3 days, a warning will be issued
WARNING
Heat Index of 110 for 3 hours or more (Issued 6-24 hours in Advance)



Risk Factors for Heat-Related Illness

Conditions that can increase the risk for heat-related illness include:

- ⚙ **Age:** the very young (under 4) and the elderly (over 65) are more vulnerable
- ⚙ **Obesity:** people who are overweight have greater difficulty regulating body temperature
- ⚙ **Medical Conditions:** conditions such as cardiovascular disease, respiratory disease, or renal diseases may increase a person's susceptibility to heat-related illness. Medications for these conditions may cause dehydration
- ⚙ **Alcohol Consumption**
- ⚙ **Medications:** use of medications that affect the body's ability to perspire. Call the pharmacist or prescribing practitioner with any questions
- ⚙ **Excessive Exposure:** people who are outdoors for long periods can be overcome easily with heat and humidity
- ⚙ **Parked Cars:** leaving people and pets in parked cars

FOR MORE INFORMATION ...

www.health.state.mn.us www.nws.noaa.gov

www.cdc.gov/disasters/extremeheat



During an extreme heat warning call:
United Way at **2-1-1** or **651-291-0211**



For medical emergencies call **911**

HOT WEATHER KILLS



Each year excessive heat exposure causes more deaths in the United States than hurricanes, lightning, tornadoes, floods, and earthquakes combined.

A 1993 heat wave in Philadelphia was blamed for the deaths of 115

In 1995, a heat wave killed more than 700 people in Chicago and 85 in Milwaukee

An estimated 35,000 lives were lost in the 2003 heat wave in Europe

HELP PREVENT HEAT-RELATED ILLNESS AND DEATH

Preventing Heat - Related Illness

The risk of heat-related illness increases with a rise in humidity because the skin is less able to release body heat through evaporation.



Simple precautions can greatly reduce the risk of heat-related illness and death. Some of these are:

- ⊗ Keep air circulating and use air conditioning when possible. Being in an air-conditioned environment, even if only for a few hours each day will reduce the risk of heat-related illness.
- ⊗ Visit a shopping mall, public library or other air-conditioned space can mean the difference between reversing or accelerating heat-related illness.
- ⊗ **Avoid using fans directed on individuals when the temperature exceeds approximately 100°F. Fans can actually increase heat stress when the Heat Index exceeds 100°F.**
- ⊗ Protect individuals and the environment from direct sunlight by drawing shades, blinds and curtains.
- ⊗ Do not take salt tablets unless specified by a physician. Persons on salt restrictive diets should consult a physician before increasing their salt intake.
- ⊗ Do **NOT** leave children or elderly adults in parked cars; the same is true for pets.
- ⊗ Keep outdoor activities to a minimum. Persons who must be transported should not be kept in vehicles for long periods to avoid heat that can build up.
- ⊗ Take baths, use cool cloths to the head or feet, and/or cool compresses to the groin or underarm area to cool the body. Placing hands and wrists in cool water can help prevent body temperature from accelerating.
- ⊗ Monitor person for early warning signs of dehydration, heat exhaustion and heat stroke. All staff should know the symptoms of heat related illness and when to contact emergency assistance if conditions deteriorate.
- ⊗ Stay out of the sun. Sunburn makes it harder for your body to release heat and cool down.
- ⊗ Reduce, eliminate, or reschedule your strenuous activities to the coolest part of day. At-risk individuals will benefit to stay in the coolest place available, which may not be indoors.
- ⊗ Do not drink alcoholic beverages.
- ⊗ Dress for summer. Lightweight light-colored clothing reflects heat and sunlight, and helps your body maintain normal temperatures.

HEAT EXHAUSTION	HEAT STROKE
I. Cause Depletion of body fluids and electrolytes due to exposure to intense heat or the inability to acclimatize to heat, resulting in prolonged or severe diaphoresis.	I. Cause Failure of temperature- regulating mechanism of the body due to prolonged exposure to high temperature.
II. Onset May develop slowly after exposure to heat for several days and inadequate or unbalanced replacement of fluids and electrolytes.	II. Onset May develop quickly (within minutes).
III. Similarities <ul style="list-style-type: none"> ◦ Headache ◦ Vomiting ◦ Dizziness ◦ Muscle cramps (arms, legs, abdomen) ◦ Fatigue ◦ Rapid pulse (tachycardia) ◦ Nausea ◦ Slight loss of appetite 	III. Similarities <ul style="list-style-type: none"> ◦ Headache ◦ Vomiting ◦ Dizziness ◦ Muscle cramps (arms, legs, abdomen) ◦ Fatigue ◦ Rapid pulse (tachycardia) ◦ Nausea ◦ Slight loss of appetite
IV. Differences <ul style="list-style-type: none"> ◦ Profuse perspiration ◦ Cool, moist skin ◦ Rapid respiration ◦ Body temperature may be normal, or slightly below normal, or as high as 102.2°F ◦ Possible giddiness 	IV. Differences <ul style="list-style-type: none"> ◦ Absence of perspiration ◦ Hot, dry, red or mottled skin ◦ Slow deep respiration ◦ Extremely high temperatures (104°F / 40°C or above, rectally) ◦ Mental confusion, disorientation, delirium, irrational behavior, feeling of euphoria or impending doom, diminished level of consciousness or abrupt loss of consciousness ◦ Confusion may occur early or late ◦ Signs of shock
V. How to Intervene Cool fluids, loosen tight clothing, recumbent position, cool shaded environment, elevate legs, transport to medical facility for medical follow up.	V. How to Intervene Call 911 for transport to medical facility immediately; cool water, sponging, and fluids by mouth if still alert; and reduce body temperature to 102°F as rapidly as possible.